WHAT IS CLAIMED IS:

1. An exhaust gas purifier comprising a catalyst installed in the exhaust pipe of an engine and a secondary air pump for supplying secondary air into the exhaust pipe, wherein said secondary air pump is operated in accordance with the operating condition of the engine.

2. An exhaust gas purifier comprising a catalyst installed in the exhaust pipe of an engine and a secondary air pump for supplying secondary air into the exhaust pipe, wherein said secondary air pump is operated after the engine has stopped.

3. An exhaust gas purifier according to Claim 2, further comprising a fuel pressure regulating means for regulating the fuel pressure in a fuel pipe, wherein the fuel pressure in said fuel pipe is reduced after the engine has stopped.

4. An exhaust gas purifier according to Claim 3, wherein said fuel pressure regulating means is a bypass valve installed in parallel with a fuel pressure regulating valve.

5. An exhaust gas purifier according to Claim 3, wherein said fuel pressure regulating means is a fuel pump for supplying fuel from a fuel tank to an injector and the fuel pressure in the fuel pipe is reduced by rotating the fuel pump in reverse.

6. An exhaust gas purifier according to Claim 2, wherein said secondary air pump

is operated for a specified length of time after the engine has stopped.

7. An exhaust gas purifier according to Claim 2, further comprising a means for measuring and/or a means for estimating the exhaust pipe temperature of the engine, wherein said secondary air pump is operated for a specified length of time after the engine has stopped when the measured or estimated exhaust pipe temperature is outside a specified range.

8. An exhaust gas purifier according to Claim 2, wherein said secondary air pump is operated for a specified length of time after the engine has stopped when any of the water temperature sensor, suction air temperature sensor, catalyst temperature sensor and exhaust pipe temperature sensor of the engine is judged to have failed.

9. An exhaust gas purifier according to Claim 2, further comprising a controller for controlling the suction valve, exhaust valve, throttle valve and ISC valve of the engine, wherein said suction valve, exhaust valve, throttle valve and ISC valve are fully opened after the engine has stopped.

10. An exhaust gas purifier according to Claim 2, further comprising a means for rotating the crank shaft of the engine, wherein said crank shaft is rotated for a specified number of times or up to a specified crank angle after the engine has stopped.

11. An exhaust gas purifier according to Claim 2, wherein said secondary air inlet is provided near the exhaust valve of the engine.

12. An exhaust gas purifier according to Claim 2, wherein said secondary air inlet is provide in the upstream side of the catalyst.

13. An exhaust gas purifier according to Claim 2, wherein said secondary air inlet is provide in the downstream side of the catalyst.

14. An exhaust gas purifier according to Claim 2, further comprising a means for measuring and/or a means for estimating the catalyst temperature, wherein said secondary air pump is operated in accordance with the measured or estimated catalyst temperature.

15. An exhaust gas purifier according to Claim 14, further comprising a means for measuring and/or a means for estimating ambient temperature, wherein said secondary air pump is operated in accordance with the measured of estimated ambient temperature and measured or estimated catalyst temperature.

16. An exhaust gas purifier according to Claim 14, wherein said secondary air pump is operated for a specified length of time after the engine has stoppe d when the measured or estimated catalyst temperature is outside a specified range.

17. An exhaust gas purifier according to Claim 2, wherein said secondary air pump operates intermittently.

18. An exhaust gas purifier according to Claim 2, wherein the number of revolutions of said secondary air pump after the engine has stopped is less than that while the engine is in operation.

19. A controller of an exhaust gas purifier comprising a catalyst installed in the exhaust pipe of an engine and a secondary air pump for supplying secondary air into the exhaust pipe, wherein said secondary air pump is operated after the engine has stopped.